
Nature's Call

An Activity Newsletter for Kids by Utah's Project WILD--Spring 1998

News of the Natives - Fish that is!

Close your eyes and imagine what your city or town looked like 200 years ago. There were no houses, no cars, no street lights and no grocery stores. No grocery stores! Where did the food come from?

Long ago, Native American people living in Utah got their food from the land. They grew gardens and had small farms for vegetables. They hunted in the woods and fields near their homes. For many of these people, fishing was also an important way of gathering food.

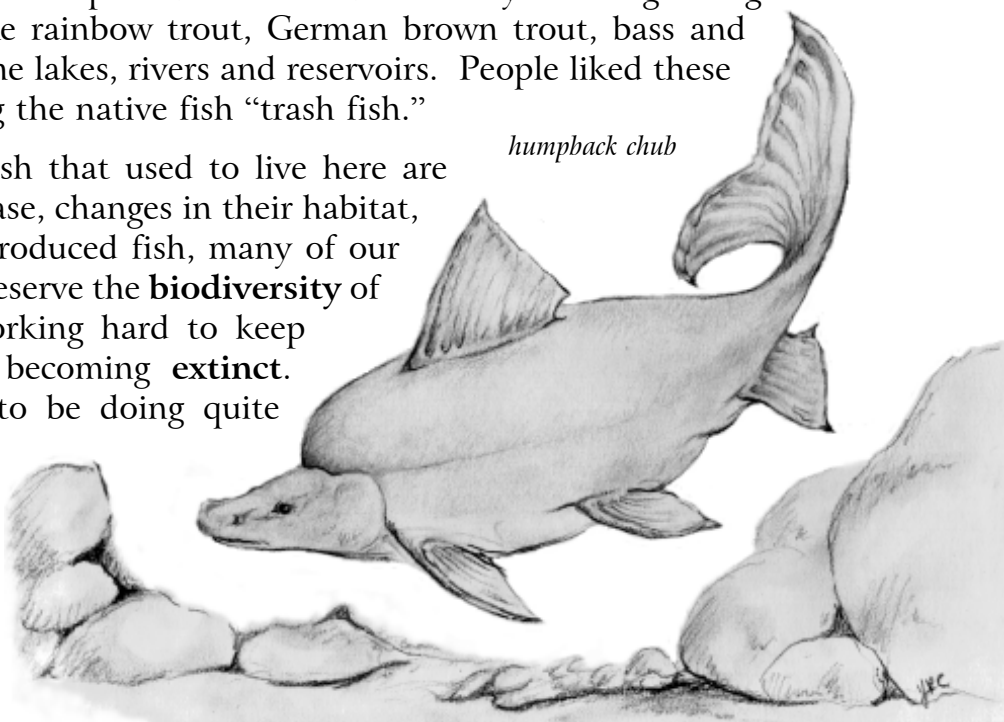
When white settlers came to this land, they needed to find food, too. They watched how the Native Americans hunted, farmed and fished, and tried some of their methods. Many were very successful. The fish they caught back then were different from the fish we catch in our reservoirs today. **Native** fish with names like *squawfish*, *chub*, *whitefish*, *sucker* and *cisco* were very common.

Early pioneers tell stories of how whole towns would get together by the local river to net fish. Young boys and girls would swim across the river with one end of a big net. Their parents would hold onto the other end. Men would ride their horses up the river and scare fish into the net. When the net was full, everyone would help pull in the fish. When evening came, everyone would sing and dance and eat fish. Not all the fish were eaten that day. People would take some home and can them in bottles or dry them in the sun to save them for the winter. The children would even sell some to the stores and restaurants for extra money!

After the **Depression** of the 1930s, many people moved into the cities to get jobs. People became less dependent on the land. Now they went fishing for fun instead of for food. Many dams were built to provide water and electricity for the growing cities. New kinds of fish, like rainbow trout, German brown trout, bass and perch were **introduced** into the lakes, rivers and reservoirs. People liked these **exotic** fish, and started calling the native fish "trash fish."

Today, many of the native fish that used to live here are disappearing. Because of disease, changes in their habitat, and competition from the introduced fish, many of our natives are endangered. To preserve the **biodiversity** of Utah's fish, biologists are working hard to keep these endangered fish from becoming **extinct**. Luckily, some natives seem to be doing quite well. One of these natives, the Bonneville cutthroat trout, recently became Utah's state fish.

humpback chub



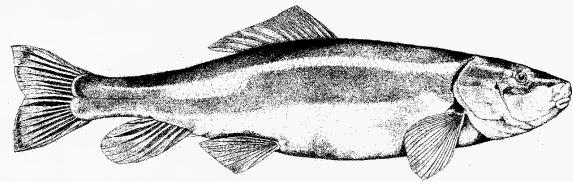
*Come along as we learn more
about Utah's native fish!*

Far-out Fish!

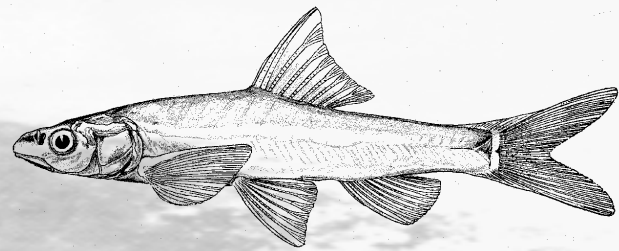
Having lots and lots of time (millions of years) to adapt to their surroundings, Utah's native fish have thrived in the rivers, streams and lakes of our state - until recently. Although our natives have some interesting adaptations to help them survive, some of the changes brought on by rapid human population growth and alteration of our rivers and lakes have been more than they can handle.

Events that led to drops in native fish populations included removing too much water from streams, building dams on rivers that changed water flow patterns and temperature, and purposefully or accidentally releasing non-native predatory fish into waterways. Unfortunately, many of our native fish are now listed as Threatened or Endangered.

Read about some of the interesting adaptations of Utah's native fish below. Then imagine a river or lake habitat in which a native fish could thrive, and create and draw your own fancy fish with adaptations that help it survive in that habitat. Now, since your fish is just an imaginary fish, and real fish cannot just change when their habitat changes, also think of ways you can help protect and restore the habitat that native fish need to survive.



Feeding: June suckers live in Utah Lake. They have thick, fleshy sucker lips to slurp up and filter algae, insect larve and detritus from the bottom of the lake.



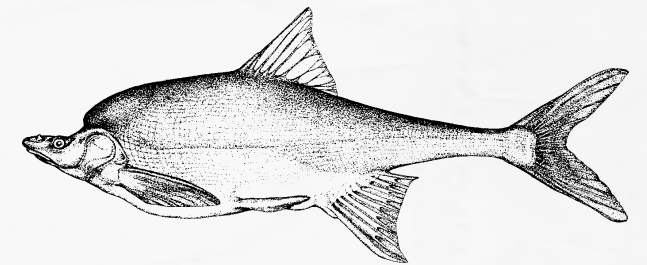
Defense: Woundfin are a type of small minnow that live in a small part of the Virgin River in southern Utah. They have an especially sharp pointed spine on their top fin that can inflict a wound.



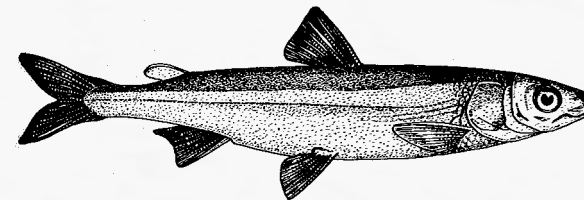
Coloration: The Bonneville cutthroat trout, our new state fish, has dark colored bars and spots on its body that help it blend in with the rocks on the bottom of its environment.



Temperature Control: The Colorado squawfish is a really cool fish. In fact all fish are, since they are cold-blooded and only get as warm as the water they live in. The squawfish is a large powerful predatory fish that is adapted to warm and silty waters of the Colorado and Green rivers. Dams built on these rivers have made the waters too cold for them.



Body Shape: The humpback chub is named for a fleshy hump behind its head. This hump is thought to act as a keel that stabilizes this fish in eddies below large boulders in very fast-flowing waters along parts of the Colorado River. They are very scarce and were listed as an Endangered species in 1973.



Reproduction: The Bonneville cisco is one of four fish found only in Bear Lake in northern Utah, and nowhere else! Once a year in mid-January, they swim out of the cool lake depths to the shore to lay their eggs. One female can lay up to 3,600 eggs at a time. Many of the eggs end up as food for other fish in the lake, but the cisco rely on the great number of eggs to ensure that at least some hatch and grow into adults.

Fishing for Meanings

Match the terms and examples on the left with their definition on the right.

1) ____ **Biodiversity:** Species extinction and ecosystem destruction results in a loss of biodiversity.

2) ____ **Conservation Species:** Bonneville cutthroat trout are a conservation species, protected by a Conservation Aggrement.

3) ____ **Endangered:** Bonytail chub have been severely reduced in numbers due to flow reduction and are endangered. Very few still exist in the wild.

4) ____ **Endemic:** The Bear Lake sculpin is endemic to Bear Lake and is found nowhere else on Earth.

5) ____ **Exotic:** Exotic rainbow trout compete with native trout in waters they both inhabit.

6) ____ **Extinct:** The Utah lake sculpin that once occurred only in Utah Lake has been considered extinct since the 1950s.

7) ____ **Extirpated:** The Colorado squawfish has been extirpated from the Grand Canyon.

8) ____ **Indigenous:** The speckled dace is indigenous to Utah.

9) ____ **Native:** The Bonneville cutthroat trout is native to Utah.

10) ____ **Non-native:** Mosquito fish are a non-native predator of native fish eggs.

11) ____ **Species of Special Concern:** Desert suckers, restricted to the Virgin River Basin, are classified as a species of special concern due to their limited distribution.

12) ____ **Threatened:** Although not native to Utah, the Lahontan cutthroat trout is listed as a state threatened species because it is federally listed as Threatened.

a. An introduced, non-native species that often competes with native species for food, water, shelter and space, or preys upon them.

b. A term used to describe the variety of life on Earth, including variety within these living things themselves (genetic variation), variety in interrelationships between living things and their environments, and the variety of ecosystems or habitats of the Earth.

c. Same as exotic.

d. A state of Utah category referring to a species that has experienced a substantial decrease in population, distribution and/or habitat availability or occurs in limited areas and/or numbers due to a restricted or specialized habitat or both of the above.

e. A species, subspecies or population that is threatened with extirpation due to very low or declining numbers, alteration and/or reduction of habitat, detrimental environmental changes or any combination of the above, and continued long-term survival is unlikely without implementation of special measures.

f. A species that is native to an area and occurs only in that particular area.

g. A species that no longer exists anywhere in the world.

h. A species that evolved and exists within a particular area.

i. A species that is endemic (native) to a particular area, but is found elsewhere as well.

j. A species, subspecies or population that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the world.

k. A species that has been eliminated from a particular area in which it formerly occurred, but is not extinct.

l. A state of Utah category, adopted in 1995, to protect and help recover declining species without official federal listing.



least chub